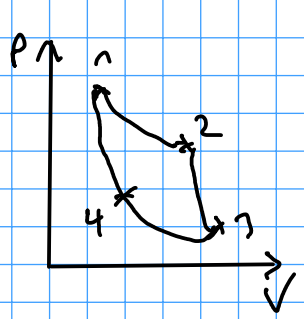

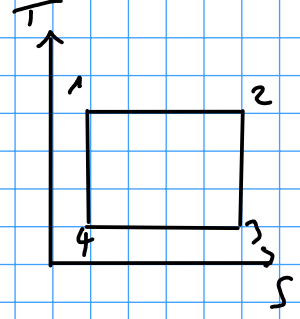

$$U = \oint dU = -\oint p\,dV - \oint T\,dS$$

$B < B_c, \quad R > R_c$

$$\eta = \frac{B}{B+R} = \frac{1}{1+\frac{R}{B}} < \frac{1}{1+\frac{R_c}{B}} < \frac{1}{1+\frac{R_c}{B_c}} = \frac{B_c}{B_c+R_c} = \eta_c$$